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The Wise Man of the Scriptures; or, Science and Religion.

A DISCOURSE

DELIVERED IN THE

Village Church in Amherst, March 2d, 1864,

AT THE FUNERAL OF

Rev. Prof. EDWARD HITCHCOCK, D. D., LL. D.

BY WILLIAM S. TYLER,

PROFESSOR IN AMHERST COLLEGE.

SPRINGFIELD:
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DISCOURSE.

"AND HE SPAKE OF TREES FROM THE CEDAR TREE, THAT IS IN LEBANON EVEN UNTO THE HYSSOP, THAT SPRINGETH OUT OF THE WALL: HE SPAKE ALSO OF BEASTS, AND OF FOWL, AND OF CREEPING THINGS, AND OF FISHES."

I. KINGS, iv. 33.

IT is not for the gratification of an idle and curious fancy, that I have chosen these words, as the theme of discourse on this afflictive occasion. They suggest thoughts in harmony with the all-wise but mysterious Providence, that has called us together. They remind us of our great loss. But they are also fruitful in the instruction and the consolation, which we need.

Wherever the Sacred Scriptures are known, the name of Solomon is a synonym with wisdom. They pronounce him, without hesitation and without exception, wiser than all men; and the variety and extent of his human knowledge, in so early a period of the world's history, go far to justify the assertion, irrespective of the divine wisdom which was imparted to him by supernatural inspiration. He was emphatically the *savant* of Israel, a land which excelled in poetry and religion, rather than in science. He was the sage of the Orient. "His wisdom excelled the wisdom of all the children of the east country and all the wisdom of Egypt," the lands which were most distinguished for their early civilization, literature and philoso-

phy. His fame was not confined to the limits of his own country, widely as those limits were extended under the reign of David and Solomon. Kings and courtiers came from distant lands to see and hear the proofs of his wisdom, and went away exclaiming, that the half had not been told them. He was the earliest writer, from whom any works have come down to us, to whom the title of philosopher was strictly applicable. He deserved that name—he acquired the corresponding name of *wise man*—many centuries before Pythagoras, who first bore it in Greece. He is the *only* person whom the sacred writers extol expressly for literary and scientific attainments. The Bible is little given to commendation or censure of individual characters. But Solomon is a marked exception. The Old Testament labors to extol, we had almost said, to *exaggerate*, the incomparable greatness of his wisdom and the matchless glories of his reign; and the New Testament echoes the praises of the Old.

If he was not born a universal genius, he cultivated and acquired a singular variety of talents. His education was doubtless the best, which the kingdom could furnish, including the instructions and example of his father David, who was at once the sweetest poet and one of the greatest warriors and statesmen of his day. Yet when he came to the throne, and God bade him ask what he should give him, modestly regarding himself as a mere child, quite incompetent to the government of so great a people, he asked for wisdom. "And God *gave* Solomon wisdom and understanding exceeding much, and largeness of heart, (or greatness of mind), even as the sand that is on the sea-shore." In accordance with a view common to the sacred writers and quite characteristic of them, the author of the sacred history reckons Solomon's literary works and scientific achievements among the results of that wisdom, which was the gift of God. Besides administering the government, building the temple and other magnificent monuments of his wealth, power and taste, he wrote

an immense number of works on a great variety of most diverse subjects. He was a poet. "His songs were a thousand and five." Among or besides these, was that remarkable one, which has come down to us, and which, on account of its unrivaled beauty and richness, has always and every where been known by the distinguished appellation of the Song of Songs. He was a moral philosopher. "And he spake three thousand proverbs," which have been preserved in part in the Book of Proverbs, a book remarkable alike for its instructive sentiments and for its pithy and beautiful style. Nor is the Book of Ecclesiastes less remarkable for its profound and original discussion of the most difficult questions in ethics and theology, than is the Book of Proverbs for its sententious oracles touching human nature and human life. At the same time, he was also a naturalist. "He spake of trees from the cedar tree that is in Lebanon even unto the hyssop that springeth out of the wall: he spake also of beasts, and of fowl, and of creeping things, and of fishes." These early and, in that age particularly, rare works in natural history are all lost, and in the absence of any information touching their contents, it is impossible to decide, whether they were purely scientific or whether they were illustrative also of the works and ways of God. Though we cannot but think, the latter supposition is far more probable, both from the character of Solomon as it appears in the sacred history, and also from the analogy of the books, which have come down to us from his pen, which abound in illustrations of religious truth drawn from the habits of the lower animals and from the anatomy of the human body.

But the highest wisdom of Solomon, and the crowning excellence of his character, was his piety. This was, by no means, perfect. Neither his private character, nor his conduct as a ruler, was entirely without reproach. As if to show the vanity of human wisdom as well as of human glory, he was suffered to fall into many and gross sins.

Judging from the Book of Ecclesiastes, which we cannot but believe to be a faithful portraiture of his own religious experience, he must, at times, have been strongly inclined to skepticism and even materialism, as, we know from his history, he was to the worship of false gods and the love of strange women. But, under the guidance of the Divine Spirit, he worked out the difficult and sometimes apparently doubtful problem successfully, and reached the sublime conclusion that to "fear God and keep his commandments" is not only "the beginning of wisdom," but "the whole duty," or, as it is in the emphatic language of the original, the *whole* of man.

In contemplating so remarkable a character, it is interesting to observe, in the first place, the use, which the providence and the Spirit of God made of his wisdom and genius. What honor he put upon him! Though a king, he was king of a comparatively small, obscure and isolated kingdom, which was soon after divided, and almost crushed between the great empires of Assyria, Persia and Egypt, and at length conquered successively by the Greeks and the Romans, who always regarded the Jews as the most despicable of all the subject nations. Yet the history of Solomon, incorporated with the history of God's chosen people and thus associated with the religion of Christ, has been read by more persons than ever read Plutarch's Lives or the Annals of Tacitus. His name has been pronounced, as the wisest of men, by myriads of children, who never heard of a Solon or a Cicero, an Alexander or a Cæsar. Thus it is that God delights to honor genius and learning, when they are chiefly ambitious to honor him.

And God has honored this wisest of men, not so much in perpetuating his name, as in using him for an instrument of good to others. What untold multitudes have been guided and stimulated in the pursuit of true wisdom by the history and the very name of Solomon! And how

many of the greatest as well as the humblest minds have been instructed by his writings, as they have been read in the synagogues and churches in all ages, and are now read in families without number in every part of the civilized world. What a different book the Bible would have been without the three Books, that bear the name of Solomon. What a mine of practical wisdom is opened to the world in the Proverbs! What a guide and solace to doubting minds, and, at the same time, what a check and balance to worldly and ambitious spirits, is bequeathed to the ages in Ecclesiastes! And with what profit and delight have the church and the pious soul seen themselves in the mirror of the Song of Songs, bedecked and crowned as the bride of the Son of God, the Savior of the world!

God does not need the testimony of wise and great men to his works or to his word. But in condescension to human weakness, he often employs it for the elucidation of the truth and the confirmation of our faith. If they really love and obey the truth, great minds reflect more honor on the God of truth, as Sirius or the sun shines more brightly to his Maker's praise, than a star of inferior magnitude, and also draws after him a brighter and more numerous array of planets and satellites in his magnificent circuit around the central sun of the universe.

In the second place, we are led to think of the natural and normal connection between learning and religion. God has put great honor upon learned men in the very composition of the Sacred Scriptures. This is seen in the bare fact, that so large a portion of the Books of the Old Testament, and more than half of the Books of the New, were written by men distinguished for their learning. Moses was "learned in all the wisdom of the Egyptians." Five of the largest and most important Books were from his pen—in a sense, they are the foundation of the whole Jewish and Christian Revelation. The author of the Book of Job had manifestly observed and studied the

movements of the heavenly bodies, the internal structure of the earth, the animals whether of the land or the water, and his own bodily and mental constitution. Three Books bear the "image and superscription" of Solomon. We might well speak of Isaiah, who was doubtless trained in the schools of the prophets, and Daniel, who surpassed all the wise men of Babylon in human as well as divine knowledge, and we know not how many other prophets, who probably received the best education that could be found in their times, and Ezra, who was qualified for revising and closing the canon of the Old Testament, by prodigious learning combined with true piety. But let us pass on to the New Testament, and there we shall find, that the majority of all the Books—fourteen out of twenty-seven—were written by one man, and that man learned in all the wisdom of the Jews and the Greeks. The Spirit as well as providence of God employs fit instruments and none but learned men and profound thinkers would have been suitable instruments for writing the Books of the Law, the Philosophy of Human Life, (if I may so style the subject both of Proverbs and Ecclesiastes), and the Didactic Theology of the New Testament.

It is only science and philosophy falsely so called, that is ever disparaged in the Scriptures. When human wisdom exalts itself above the wisdom of God, or sets itself in opposition to the kingdom of God, then of course it is false and deserves to be dishonored. But true wisdom is modest, humble, teachable. Its symbol, whether in science or in religion, is the little child, sitting and inquiring at the feet of his father. All true knowledge is one, as the universe is one and has but one author. Its sum, as well as its source, is in God. "Known unto God are all his works from the foundation of the world." The knowledge of him therefore involves a knowledge of all his works, as the fountain involves the stream, as the mind of the builder comprehends the building, as the knowledge of the writer includes the knowledge of all his writ-

ings. And, vice versa, the knowledge of any one of his works is a help to the knowledge of any other, and is a part of the knowledge of God himself. The science of the heavens, the science of the earth, the science of man, whether of the body or the mind—these are all parts of the science of God. There is a necessary relation between all other knowledge and the knowledge of God, and since that is, in its own nature, the highest knowledge, all other knowledge should be, and so far as it is genuine, will be ancillary to it. Galileo and Copernicus were God's chosen instruments for revealing himself to men, not less truly, though in a different way, than Job and David. Indeed the revelation which the Holy Ghost made through the *latter* was never understood in all the fullness of its meaning, till, through the former, Divine Providence revealed the unimagined extent and the stupendous revolutions of the material universe. Then the readers of the Scriptures began to see in those words which the Holy Ghost teacheth, a beauty and a grandeur such as the writers themselves never could have conceived or imagined. "When I consider thy heavens, the work of thy fingers, the moon and the stars which thou hast ordained, what is man that thou art mindful of him, or the son of man that thou visitest him? Lo! these are parts of his ways, but how little a portion is heard of him! But the thunder of his power who can understand?" What a fullness of meaning, never before comprehended, do these words of inspiration derive from the light of modern science! The Psalmist saw the glory of God in the light of one sun. Thanks to the science of astronomy, we see it in the light of ten thousand. He illustrated the law of God by the order and harmony of one system; thanks to the discoveries of Newton and Kepler, we can see the law of gravitation and the law of love stretching out in parallel lines through suns and systems without number. Nor do those sciences which pertain to man, shed less light on the word of God and the truths of religion. It was left for modern

anatomy and physiology to reveal *how* "fearfully and wonderfully we are made." Psychology discloses the still more wonderful adaptations and the still more fearful constitution of our immortal spirits. Comparative philology testifies in harmony with Revelation, that "God has made of one blood all the nations of men that dwell on the face of the earth," and as they sprung from a common ancestor, so they need a common Savior; "as by one man's disobedience all were made sinners, so by the obedience of one all may be made righteous." And philology, in its most comprehensive sense, including language, history, antiquities and all the kindred branches, carries us back to the times and places in which the sacred writers lived, and enables us to hear their own language as it were from their own lips; nay, carries us back to the Genesis of our race, and then brings us down through the Deluge, and the Dispersion, and Exodus from Egypt, and the giving of the Law, and the reigns of the Kings, and the Captivity, and the fullness of time when he came who was the Desire of all Nations, the scenes of the Gospels also, and the Acts of the Apostles, the establishment and growth of the Christian Church, in a word all along the stream of sacred history and far down the stream of prophecy toward the consummation of all things, as it is disclosed in the Revelation. And as God reigns in the material universe, so he reigns also in human history. As the one is his book of Creation, so the other is his book of Providence, and both run in parallel columns alongside his book of Revelation in that grand harmony which contains all the truth that God has revealed to man. And he who raised up a Solomon to write in the Old Testament and a Paul to write in the New, raised up also, each in his time, a Newton to discover and proclaim that all the laws of nature are only the rules and methods of God's working, and an Edwards to teach that all history is directly or indirectly a history of redemption. As the wider extension of the bounds of the visible universe, through the discoveries of

astronomers, has poured a flood of light and glory upon the natural attributes and the natural government of God, which has given a new significance to the language of inspiration; so the growth of the Church and the progress of Christian civilization, as developed by the most enlightened historians, have furnished some demonstrations of Christ the wisdom of God, and Christ the power of God, of Christ the light of the world and Christ the life of the world, of Christ as the center of the ages and nations, which could not have been seen by the eyes even of prophets and apostles.

But, in the third place, our text suggests especially the connection between the several branches of natural history and the religion of the Bible. The writer of some of the most instructive books in the Bible was also the author of books on botany and zoölogy, and the fact is deemed worthy of commemoration in sacred history: "And he spake of trees from the cedar tree that is in Lebanon even unto the hyssop that springeth out of the wall; he spake also of beasts, and of fowl, and of creeping things, and of fishes." So numerous and so wonderful are the analogies and correspondences between nature and revelation, as not only to prove that they both proceed from the same author, but also to suggest the idea that nature was chiefly intended to be only a kind of mould into which revelation was to be cast; natural objects only types and symbols of spiritual things; and all the myriad sights and voices of the natural world a natural language by which God speaks to the souls of men, and the souls of men in turn speak to each other and to God. Figurative language is not a mere play of the imagination. It is not by some accidental discovery or human invention that all words in all languages originally and properly signify objects, actions and events in the outward world. The material world was *made for this purpose.* It is a universal *language.* The elements of nature are a universal alphabet, and their

infinitely varied compounds are so many words and thoughts of God intelligible to all, more or less understood by men of all ages and nations, and directly or indirectly the only medium through which men communicate their thoughts to each other as well as to God. We often hear of the language of flowers. There is much of fancy in the details, but the idea is based on a profound truth. There *is* a language of flowers. There is also a language of plants and animals, and it is the language of God. Hence it is that the sacred writers use so much of this language; and the Son of God while here on earth appropriated it as if it were peculiarly his own. "Consider the lilies of the field." "Behold the fowls of the air." "I am the true vine," that is, the real, genuine vine, "ἄμπελος ἀληθινή"—the vine commonly so called is only the image and shadow of the real. "My Father giveth you the true bread," that is, the *real* bread, which imparts real life. How full of such lessons is the whole Bible! The parables of our Lord are all such. And how full they are of wisdom, life and power! And the more this language of nature is studied and analyzed, like those languages of men which are fashioned after it, the more wonderful does its structure appear. The better its nature and power are understood, the more distinctly does it speak to us, as the voice of God to our souls, and teach us, in part at least, the same great lessons of truth and duty which he inculcates in his written word.

All science, as we have before said, is of God and from God. And to the educated and reflective, history and psychology may perhaps reveal more of God than even astronomy and geology. But the physical sciences address themselves more to the senses, and so speak a language more intelligible and impressive to the *common* mind.

Again among the physical sciences, mechanics, optics, and the several branches of natural philosophy, develop chiefly the relation of cause and effect, which is more nearly allied to metaphysical ideas. But botany, zoölogy

and the several branches of natural history have to do with *final* causes, with the adaptations of means to ends, which are more directly and palpably of a moral nature. Hence it is from the internal structure of the earth, and from the anatomy and physiology of plants and animals, including man, the highest of the animal creation, that natural theology has drawn most of the arguments and illustrations by which it substantiates the great doctrines of natural and revealed religion.

Seen in the light of these sciences, the world in which we live is a Bible as full of sacred history, and miracles, and prophecies, and types—of antitypes also, and fulfillments of prophecy—and new creations, and progress towards a higher and better future, as the written word of God; and the whole creation almost literally groaneth and travaileth together in birth-pangs for a new and higher life, while it waits in earnest expectation for the manifestation of the sons of God.

We cannot but remark, in the fourth place, as an obvious corollary from the foregoing propositions, upon which we need not dwell, that the natural tendency of such studies is to faith and humble piety. The poet has well said, "The undevout astronomer is mad." He stands in the temple of God, built by God's own hand, and admires the structure, but refuses to bow down and worship, perchance (if he is unbelieving as well as undevout) ignores the very existence of any builder. But the undevout and unbelieving naturalist is, if possible, still more mad. He comes into the very sanctuary, where God dwells and works and imparts *life*, and sees no chemist in the laboratory of nature, no workman in the curious workshop of the human body, no optician's hand in the structure of the eye, no designer in a world full of the most wonderful contrivances, no *living fountain* in a world through which *life* flows everywhere in gushing and overflowing streams.

Nor are such studies more favorable to faith than to hu-

mility. "The kingdom of men found in science," says Lord Bacon, "is like the kingdom of heaven; it can be entered only in the character of a little child." The student of nature, like the student of the Bible, is a mere inquirer at the oracles of God. It is his business to interrogate nature, to register her responses, and then to classify and generalize the results. He sits like a little child at his father's, or if you please his mother's feet, and from morning to night does nothing but ask questions. If he wanders away from that position he is soon lost. If he relies, for a little, on his own wisdom and strength he is soon taught by bitter experience that he knows nothing, that he can do nothing, that he can be nothing independently of his parents.

And facts correspond with these arguments from the nature of the case. There are of course exceptions. Little children are not always humble and teachable. Naturalists have not all been humble and believing Christians. But by far the most and the greatest of them have not only believed and worshiped the God of the universe, but have gone to the oracles of revealed truth and the temples of Christian worship with the same humble, teachable and believing spirit. Persian Magi, astronomers, star worshipers, or, as they are called in our version, wise men from the East, were the first to pay their homage to the child that was born to be the Redeemer and King of Israel. They saw his *star* in the East. Their science led them to the birth-land of the infant Savior. They came inquiring, "Where is he that is born King of the Jews, for we have seen his star in the East, and are come to worship him. And when they saw the star standing over where the young child was, they rejoiced with exceeding great joy. And when they were come into the house, they saw the young child with Mary his mother, and fell down and worshiped him." The name, that is written highest in the register of modern science, stands equally high in the records of Christian faith and piety.

As he looked out over the word as well as the works of God, Newton felt himself to be but a little child, standing on the shore and picking up a few shells which were cast up on the beach, while the boundless ocean of truth lay unexplored before him. Such too has been the humility and modesty, such the faith and reverential, filial love of the great majority of modern geologists and naturalists—the authors of the Bridgewater Treatises—the members of the British and the American Association for the advancement of science, whose names, while they adorn the age, illustrate the Christian religion, and whose writings and addresses at their public meetings have not unfrequently been, in their spirit though not in form, "sermons speaking not only of God but also of the Redeemer."* And such, I need not say, eminently such was the spirit of the great and good man, whose too early death, though at the age of three score years and ten, we this day deplore. Edward Hitchcock rejoiced in the honored name of geologist, naturalist, man of science, which the scientific world, with one voice, has conferred upon him. But it was his highest glory and his chief joy, that he was a humble, penitent, believing and adoring disciple of Christ.

If in the greatness and the variety of his talents and attainments, he was no unworthy representative of the wise man of the Scriptures, so was he in the consecration of all those talents and attainments to the highest and best ends. It was his mission to illustrate, in his life as well as by his tongue and his pen, the beauty and harmony of the connection between science and religion. He is dead; but his memory lives. His influence lives and will live forever. He is gone from us. But his works do follow him. His character and his writings remain to bless the world. We have lost a friend and a father here below; but we have gained one on high. Amherst College

*See in Reminiscences of Amherst College, p. 357, Dr. Robinson's motion for a vote of thanks to Dr. Mantell for his lecture before the British Association in 1850.

has lost a pillar; but he is now a pillar in the temple of God. Earth has lost a bright light; but heaven has gained a star of the first magnitude; and it will still shine upon us in the night, and guide us in our earthly pilgrimage.

The time and place forbid anything but a meagre outline of his life and character. The grateful task of writing his biography which might otherwise have been performed by some friendly hand, is superseded by that interesting auto-biography in which, his last published work, he has himself drawn the characteristic features of his life and laid bare his inmost heart with the familiarity and frankness of a conversation at his own fireside. The charm of novelty has thus been taken from any narration of incidents which might now be given. Still the occasion demands a summary of the leading events, and some analysis of the character of one who has held so high a place among scientific men, and, at the same time, been so widely known and esteemed by the masses.

The principal facts of his life in a synoptical form and in chronological order, are as follows: He was born in Deerfield, Franklin County, Massachusetts, May 24th, 1793; was principal of the academy in his native place from 1815 to 1818; was ordained pastor of the Congregational Church in Conway, June 21st, 1821, and dismissed in October, 1825; elected Professor of Chemistry and Natural History in Amherst College, August 23d, 1825; appointed State Geologist of Massachusetts, June 26th, 1830, and of the first District of New York, June 13th, 1836; received the degree of Doctor of Laws from Harvard University in 1840; was chosen President of Amherst College and Professor of Natural Theology and Geology, December 16th, 1844; received the degree of Doctor of Divinity from Middlebury College in 1846; was appointed Commissioner of the State Government to examine the Agricultural Schools in Europe, May 23d, 1850; delivered his

address on retiring from the Presidency, November 22d, 1854; was appointed to complete the Geological Survey of the State of Vermont in April, 1857; and continued to lecture in the department of Geology and Natural Theology, though for a few years past with some assistance from his sons, till 1864, when he was called to higher honors and nobler services in heaven.

His elections to membership in literary and scientific associations, in his own country and in foreign lands, and his invitations to other fields and departments of labor which he did not feel at liberty to accept, were too numerous to be mentioned on this occasion.

He was the youngest son of Deacon Justin and Mrs. Mercy Hitchcock. His father was by trade a hatter, though he labored also more or less on a farm, poor but greatly respected by the neighbors for his strong mind, sterling sense and steadfast piety. He was a soldier in the revolutionary war (as *his* father had been a soldier before him.) He was a deacon in the church, and when his pastor swerved from the evangelical faith, he tried his hand, with no mean success, in occasionally writing orthodox sermons.

His mother was a Hoyt, and belonged to a family of distinction in Deerfield. She was a woman of active mind and marked character. Her piety was without reproach. But her organ of hope was small. She was constitutionally subject to depression, and in the latter part of her life she suffered dreadfully from poor health and nervous debility. A thunder shower would throw her into a paroxysm of uncontrollable apprehension, and if the family or any member of it were detained from home under such circumstances as to excite her fears, she would stand and wring her hands in anguish till their return. Those who have known Dr. Hitchcock with any intimacy, will see at once that he united in himself the marked characteristics of both his parents—the intellectual and moral stamina of the one and the acute nervous sensibility of the other.

His boyhood was spent, with his brothers, in working on the farm. For variety he sometimes dipped into carpentering and surveying. As deputy sheriff and aid-de-camp under General Hoyt, he early had a taste of civil and military life which, his colleagues often thought, was of use to him when he became an officer in college. His opportunities for early education were limited. Obliged to labor through the day, he studied chiefly by night. When a rainy day was added to his leisure, he was delighted. In the absence of other means, he educated himself. He observed nature, and reflected on his own constitution, while following the plow. He lay on his back and studied the stars till he injured his eyesight and impaired his health. With all his disadvantages, such was the value which he attached to a thorough academical education that he set out to prepare for an advanced standing in Harvard University; but a fit of sickness so weakened his eyes, already injured by night study and overexertion, that he was obliged to relinquish all hope of ever going through college.

His first publication was a poem of five hundred lines, written partly because he knew not what else to do, and partly because his mind and the public mind at that time was full of the subject. It appeared in 1815, and was entitled "The Downfall of Bonaparte." It drew attention to the youthful author, and also procured him some substantial benefits. His next appearance before the public was in quite another capacity, that of a mathematician and astronomer. The American re-publisher of the English Nautical Almanac offered ten dollars to any man who should discover an error. The young savant of Deerfield, then Principal of Deerfield Academy, sent him a list of forty-seven errors, and, on receiving only evasive answers, published the list. This drew forth a contemptuous reply, in which the critic who has presumed to arraign the editor of the Nautical Almanac, is spoken of as "one Edward Hitchcock." The calculations for the next year

were revised with great care, but no sooner had the almanac appeared than that same Edward Hitchcock dared to send out after it a list of errors more numerous than that of the previous year. And so the controversy went on, till the editor, discovering his mistake, changed his tone, and one Edward Hitchcock became first Mr. Edward Hitchcock, and at length due acknowledgment was made in the preface, of the editor's obligations to "Edward Hitchcock, Esq., to whom much credit is due for the industry and talent bestowed upon the work." During the four years of his connection with Deerfield Academy, he went through every year all the calculations for the Farmer's Almanac, not excepting those for the weather, to which his imagination was as competent as his science was to calculate the eclipses and conjunctions.

From accounts gathered chiefly from himself it would appear that Dr. Hitchcock was not properly a *precocious* child. But in his childhood and youth he had already developed all that variety of talents and all those marked habits and characteristics which distinguished his after-life, industry, temperance, economy of time and money, originality, independence, moral courage, bad health, nervous excitability, and sometimes morbid depression of spirits. His boyhood was as unlike other boys as his manhood was unlike other men. He "looked upon ordinary amusements and recreations with a sort of contempt. He never learned to dance or play cards, never attended a ball," seldom a public dinner. All the money he could get he devoted to the purchase of books, and all the time he could spare from labor he spent in reading and study.

The four years spent in Deerfield Academy contributed largely to the development of his powers and the perfecting of his own education. He doubtless learned more, perhaps studied more, than any one of his pupils. At the same time, Providence was preparing for him a help-meet indeed, whose fortunes were ever to be interwoven with his own, and whose character, the counterpart and

balance of his own, contributed scarcely less than his to their subsequent fortunes. He was assisted in the instruction by a young lady (a Miss White from Amherst), who was destined to be an important instrument in his conversion; whose hand and pen and pencil were ever after to move, as it were, in instinctive obedience to his will, and to whom, as the helper of his studies not less than the companion of his domestic life, his greatest work was to be fitly and gracefully dedicated.

It was at this period, that he experienced that radical change in his religious belief and in his whole character, which gave a new and unexpected direction to his subsequent life. In common with not a few of the oldest and strongest churches in Massachusetts, under the subtle influence of an able and popular pastor, the church in Deerfield had drifted almost unconsciously into Unitarianism. The father of young Hitchcock, though he protested against the new doctrines, was still a member and an officer of the old church. The son not only attended the ministry but imbibed the sentiments of his pastor. And what *he* did, he never did by halves. He not only held the new creed, but advocated it. Without examination, he took up the notion, that Orthodoxy was narrow and illiberal, and as such, he hated and denounced it. But he was not satisfied. Neither his intellect nor his heart found rest. He read the Scriptures carefully from beginning to end, without any other commentary, than that which is involved in marginal references, with the simple purpose of ascertaining the truth; and he was obliged to admit, that they taught the Orthodox system. He looked at the fruits of the two systems, as they appeared in the lives of the church members, and could not deny, that there was more of Christian activity and life and power in the Orthodox churches in the vicinity, than there was in the Unitarian church in Deerfield. His principles proved inadequate to sustain him under the disappointments and trials of life. He saw in others—especially in

one other, whom he could not but esteem and love, a peace of mind, and a meekness and gentleness of spirit, which *he* knew not of. The death of a young friend, who had lived a Unitarian and almost a skeptic, but who gave his dying testimony to the evangelical faith, brought him to a decision. At last, he submitted his heart and will to the practical claims of the Gospel the very night after the death of his bosom friend.

Still he was not freed from his early misapprehensions and prejudices touching "the Orthodox." He imputed to them a belief in natural inability, limited atonement, a literal imputation of Adam's sin to his posterity, infant damnation and all the other extravagances, with which they are charged by their enemies. He still supposed them to be bigoted and uncharitable. In short, he thought them about as far from the truth and spirit of Christ, as the Unitarians. Under these circumstances, he joined the church, of which his father was a member, and set himself at work with all the zeal and energy of his nature to infuse into it more vitality; and it was only when he found his exertions opposed and in a great measure thwarted by those who should have been the foremost to aid them, that he saw clearly the radical defect and falsehood of the whole system. He had even commenced study in preparation for the ministry with his own pastor. But more and more convinced by his own observation and experience, that all was not right, nay, that all was radically wrong in that system, he broke away from the shackles, went to New Haven for the further prosecution of his studies, and there learned, for the first time, what the evangelical system as then held by the ministers and churches of New England, was, and was equally surprised and delighted to find, that their views were essentially the same which he had derived from the independent study of the Sacred Scriptures. Meanwhile the providence and the Spirit of God were showing him more and more of the desperate wickedness of his own heart, the exceeding sin-

fulness of his past life, and his personal need of a Divine and Almighty Savior. The struggle was protracted and severe. But the surrender was at length unconditional, final and complete. The foundations of a thoroughly Calvinistic creed were immovably laid in a deep and thorough Christian experience. It was not till after he was settled in the ministry, that he fully embraced the doctrines of election and the Divine purposes. But his heart was already prepared to receive them; and, when he saw them in their scriptural and doctrinal relations, he built upon them the very foundation of his personal hope and of his confidence in the final triumph of the Gospel. If the atonement of Christ was, in his view, the corner-stone of the evangelical system, the sovereignty of God was the key-stone of the arch. If he had selected any one verse of the Bible to be the symbol of his theology, it would have been this, "Of him, and through him, and to him are all things: to whom be glory forever."

As his first experience in teaching was in his native place, so his first and only settlement in the ministry was in a neighboring town. And the prophet was not without honor in his own country. Deerfield and Conway have always been proud of their association with the name of Edward Hitchcock. In Conway, while all name him with pride as their former pastor, very many remember him with gratitude and affection as their spiritual father. His ministry there was short—only about four years. But it left an impression as enduring as the rocks and hills on which the town is built, and as happy as it is enduring. There were two general revivals of religion during his pastorate, and many were added to the church. His sermons, at this time, were short, seldom over thirty minutes, clear, forcible, considerably exegetical and sufficiently doctrinal, but always eminently practical and spiritual. There was great variety in his preaching. Well aware, that the first condition of usefulness in a sermon was, that it should be heard with attention, he resorted to all suitable

means to make his discourses interesting. Sometimes he would startle the audience by preaching from strange and unexpected texts. He once preached a sermon from the word "Selah," of which the doctrine was "stop and think." In times of revival, he adopted without hesitation such measures, as he thought best calculated, under the circumstances, to secure the desired result. Once at an evening meeting, where there was considerable feeling, but things were rather at a stand, instead of pronouncing the usual benediction on the whole congregation at the close, he said, "How can I bless those whom God hath not blessed. The grace of our Lord Jesus Christ be with all those that love him in sincerity. But if any man love not our Lord Jesus Christ, let him be Anathema Maranatha." The effect was like an electric shock, and the result most happy. While his theology was decidedly of the Old School, he was practically a New Measure man; though neither his old theology nor his new measures were carried to extremes. He had a profound veneration for Mr. Nettleton, and in efforts to promote revivals, trod in his footsteps, or rather showed a similar wisdom in the use of suitable means.

During his pastorate at Conway, he found exercise and recreation in making a scientific survey of the western counties of Massachusetts. This was the beginning of that life among the rocks and mountains, which was ever after a delight and almost a passion. Like the giant in classical mythology, whenever he could plant his feet on the bosom of mother earth, he was in his element—it was his strength, his health, his life. This was also the origin of the geological survey of the entire State, which was afterwards made by the Government at his suggestion, and which has the honor of originating that rapid succession of scientific surveys, which have since done so much to develop the mineral and agricultural resources of our country.

The way was thus prepared for his appointment to be

the first Professor of Chemistry and Natural History in Amherst College. After some study and practice in the laboratory of Prof. Silliman at New Haven, he entered upon the duties of his office. The College was then in its infancy. There were but two college edifices. The Laboratory was a room in the fourth story of the present North College, the same double room afterwards occupied for many years by the Library of the Alexandrian Society —which served also the purpose of a Cabinet, a Philosophical Room, and a Chapel. "There," he remarks somewhat humorously in his valedictory address at the close of his presidency, "There morning and evening, all college assembled for their devotions. In the intervening period, the Professor of Natural Philosophy or myself made preparations for our lectures and delivered them. I thought however sometimes, that the students, at evening prayers, were more deeply affected by the mephitic gases, that had been generated during the day, than by the religious services."

The chemical apparatus was then not worth ten dollars. Cabinet there was none. Not even a beginning had been made of those magnificent scientific collections, which now adorn the college hill. For many years, he was sole professor in all the departments of Natural History. He lectured and instructed in Chemistry, Botany, Mineralogy, Geology, Zoölogy, Anatomy and Physiology, Natural Theology, and sometimes—to fill a temporary vacancy—he was the most suitable person, the college could depute to teach also Natural Philosophy and Astronomy. Like Solomon he spake of trees from the cedar tree that is in Lebanon to the hyssop that groweth out of the wall; he spake also of beasts, and of fowl, and of creeping things, and of fishes. He spake also of rocks and soils, of which, so far as appears, Solomon did *not* speak. He dealt also in songs, and proverbs, to say nothing of sermons. He lived to see those departments occupy, in whole or in part, the time of four men; the chemical laboratory and apparatus

among the finest in the United States, and the collections filling two spacious edifices, and, together with the buildings, valued at from seventy-five to a hundred thousand dollars; and all this the fruit, directly or indirectly, of his own enterprise, energy and perseverance. Dr. Hitchcock created the *materiel* and the reputation of Amherst College in the Department of Natural History.

At the same time he was deeply interested in the spiritual welfare of the students. He took a prominent part in the preaching and biblical instruction, and by all the means in his power co-operated with President Humphrey in giving to the College, from its foundation, the religious character by which it has ever been distinguished. Those students, who were here in his professorial days, will never forget the pathos and unction, the point and power, with which he preached in the College Chapel, and especially in the old Rhetorical Room in times of revival. It was in those days, also, that he labored with so much zeal and success in the cause of temperance. For two or three years—in and near 1830—his mind, his heart, his tongue, his pen were all given to this subject, so far as they could be, without interfering with the more immediate duties of his professorship; and the result was the establishment of a society in the College, pledged to total abstinence from ardent spirits, wine, opium and tobacco, which has ever since numbered among its members nearly all the officers and a large majority of the students; and the publication of several books, tracts, articles and essays—among the rest a prize essay—which have identified his name with the history of the Temperance Reformation scarcely less than with the advancement of science. No sooner was this work accomplished, than he entered with all his soul upon the series of geological explorations and scientific surveys, which occupied all the time and energy he could spare from the College, for the greater part of ten years. He did but one great work at a time. But he was never afraid of having too many smaller irons

in the fire. The great work was his business. The smaller ones were his recreation; and change was the only rest he allowed himself till sickness prostrated him and obliged him to lay aside all his occupations.*

As a professor, though already shedding lustre on the College by his scientific reputation, he claimed no superiority to the humblest of the Faculty. He was true to his colleagues as individuals, and faithful to the Faculty as a body. Though often differing from them in judgment, he always sustained the decision of the majority, and would aid in the execution, even of such laws and sentences as his own judgment did not approve, with much the same spirit, with which he would have gone to the stake as a martyr.

Called to the presidency in one of those trying emergencies through which the College has passed from time to time, he accepted the office with extreme reluctance. He had no taste for the peculiar duties of the office. Like President Edwards, he felt, that his constitution and temperament were not adapted to it. He was conscious of more or less unfitness in his own want of a college education. The innumerable details of business, of correspondence, and especially of government and police, which necessarily devolve on the president of a college, he knew, would be to him like a perpetual crucifixion. Moreover they must engross his time from pursuits which were more congenial and which promised a more ample return of money and of fame. It was as a man of science that he had gained his reputation; and it was as a man of science, chiefly or only, that he could expect to transmit his name to posterity. It was in the same capacity also, that he had hitherto been useful, and that he hoped in time to come to benefit the church and the world. It was therefore only at the sacrifice of all the cherished tastes, pursuits and aspirations of his heart, that he could take upon him the presidency.

* Several paragraphs here, and at the conclusion, were omitted in the delivery.

Besides when he looked at the condition and prospects of the College, these were anything but encouraging. The high tide of prosperity which had flowed in so unexpectedly for a time, had been followed by an ebb correspondingly low and equally unexpected. The number of students had gone down in ten years from over two hundred and fifty to less than one hundred and twenty-five. After all that the friends of the College had done in the way of private subscriptions for its relief, the income was still far from equal to the expenditure. A debt, incurred in the first place for buildings, was increasing at the rate of two or three thousand dollars a year, and that more and more rapidly as the number of students was from year to year diminishing. Should he not only sacrifice his beloved studies and his prospects for scientific distinction, but risk property, reputation, health, life—all in taking the command of a ship, which was leaking at every seam, which others, officers as well as students, were abandoning in despair, and which not only enemies and indifferent spectators, but some of its best friends, thought, must inevitably sink! Others shrunk from undertaking such a hazard. One and another was invited to the presidency but declined the office. He added his solicitations to those of the trustees, but to no purpose. They came to him as the forlorn hope of the Institution. He hesitated. He shrunk from it in every fibre of his body as well as every sensibility of his soul. But he could not refuse. He had already embarked in the vessel. He had been a subordinate officer in it for twenty years, and he had learned every rope, and spar, and plank in it. And it was a noble, nay, a sacred ship. It was freighted with all that was most precious to the church and to mankind. In an important sense, it bore the ark of God and the person of Christ. It must not, nay, it could not sink. Such, at times, was his hope. As the storm gathered thicker and beat harder upon it, he sometimes seemed to hear a voice beside him, saying, "Ne timeas; Christum

vehis." "Fear not; Christ is in the ship." Still he took the helm with fear and trembling. And he undertook it only on condition, that the Faculty should agree, for the present, to receive the income of the College, be it more or less, and divide it among them for their support. The Faculty consented. This stopped the leak at once. It was not long, before the ship began to right up and float upon the waters. The public sympathy was enlisted. Public confidence was secured. Friends came to the rescue. The State, for the first time, contributed to the funds of the Institution. Munificent private benefactors rose up one after another and placed it on a solid foundation. Students flocked in as fast as they had before run away. In ten years, the number was doubled. The College edifices also were doubled in number, and more than doubled in value. Scientific collections, cabinets, apparatus, funds may be said to have been created during this period—for there was scarcely anything before that deserved the name—and created too, with the blessing of heaven, by the genius and reputation, in one word, the character of Dr. Hitchcock. Having thus accomplished the object for which he accepted the office, and feeling also the pressure of bodily infirmities and sufferings aggravated by his excessive cares and labors, he resigned the command and fell back again into the ranks—rose again, let us rather say, for so he viewed it, to those unclouded heights of science and religion, on which he had before delighted to stand, but which now appeared more serenely beautiful than ever, as he looked back upon the region of clouds and storm through which he had passed.

His presidency formed a new era in the government and discipline of the College, as well as in its outward condition. During his professorship, he had always been an advocate of a more paternal government. He never relished the traditional system of college pains and penalties. Like too many other hereditary notions and practices which prevail among the students, they seemed to

him to savor too much of the dark ages. Perhaps he saw their absurdity the more clearly for not having been educated in the cloisters of the university. Nor was the system of college appointments much more to his liking. He preferred the use of moral and Christian motives. He had great faith in moral suasion and personal Christian influence. When he came into the presidency, his ideas, of course, prevailed in the discipline and, to some extent, though not so fully, in the instruction of the College. Whatever may be true of other institutions in other circumstances, there was doubtless an imperative necessity for reform in the administration at Amherst. However well it might have suited other older, larger and richer colleges with students younger, less manly and less governed by religious principles, it was not adapted to a young institution dependent on the good will of its students for its very existence, and those students, the majority of them, mature Christian men preparing for the Christian ministry. From the commencement of Dr. Hitchcock's administration, there was a great falling off in the number and aggravation of cases of discipline. He strove to rule in the hearts of the students; and the confidence which they felt in his truly parental character and feelings towards them was, in fact, the sceptre of his power. Unwillingness to grieve their *father* restrained them from many an act of disobedience, which they would have gladly perpetrated under the government of a mere *president* of a college *Faculty*. Of course in so large a family, there were perverse children, who took advantage of his parental kindness and grieved the good man to his inmost heart. Perhaps he sometimes bore and forbore too long with such ingrates and rebels. But of the wisdom of the policy, in the circumstances of the case, and of its good results in general, none can doubt, who is acquainted with the facts.

The religious character of the young men under his care now became more than ever the object of his deepest

solicitude. He longed and labored to extend a Christian influence into all the departments of instruction and government, so that Amherst College might realize the idea of a Christian college. The language of President Witherspoon of the College of New Jersey was none too strong to express the earnestness and intensity of his feelings: "Cursed be all that learning, that is contrary to the cross of Christ; cursed be all that learning, that is not coincident with the cross of Christ; cursed be all that learning, that is not subservient to the cross of Christ." He insisted on the maintenance of the weekly Bible exercise and was anxious to have every member of the Faculty take such a share in biblical instruction, as was most congenial to his department, and as would most effectually link *every department* to the Bible. Believing with all his heart in the reality and the necessity of revivals of religion—their necessity everywhere and their especial necessity in college—he labored assiduously, and prayed continually, for their frequent occurrence; and almost every year witnessed the fruit of those prayers and labors in the sanctification of the church and the conversion of a few souls, if not in a more copious outpouring of the spirit. He established a weekly religious meeting at his own house, at which he invited especially professors of religion, but others also, if they wished, to meet him for prayer and the familiar discussion of some question of practical religious interest. These meetings were always interesting and instructive, and sometimes they overflowed the study, and turned the parlor, and almost the whole house, into a Bethel. More than one revival of religion first manifested itself there, and there many an irreligious youth has opened his mouth for the first time in prayer and praise. In times of unusual religious interest, this was accompanied on the same evening, or followed on the next evening, by a meeting for inquiry, which will be remembered with gratitude and joy by many a minister in his parish and many a missionary in far off heathen lands.

For periods of less attention to personal religion, with the cordial co-operation of the professors and tutors, he instituted a plan of personal Christian intercourse between the officers and students, by which all might be sure to be reached, watched over and cared for in their immortal interests. Soon after their admission to College, he used to invite the Freshman Class, in a body, to meet the officers and their families at his house, that a personal acquaintance might be thus early formed, and a personal attachment grow up, which, he hoped, would deter them from evil and allure them to good more powerfully than any college censures or even college rewards. He encouraged the students to come to him with all their cares and troubles. If any were sick, he knew, as if by instinct and by experience, how to counsel them. If any were afflicted, he could comfort them. If any were poor, he usually found some way to help them. If any were discouraged about their studies, he entered at once into their feelings, and inspired them with hope and courage. If any were poor in spirit, sick of sin, and ready to despair of eternal life, he directed them to the great physician. He had an experience wide enough and a heart large enough for them all.

And this conducts us, at once, as it seems to me, into the secret of his great power. It was the breadth of his sympathies growing out of the width of his experience—it was the clearness and compass of his views and the depth of his feelings growing out of the largeness of his powers and susceptibilities. He passed through a great variety of experience—in humble life and in high life, among the masses and with the great, in health and sickness, under the power of error and sin and in the glorious liberty of truth and righteousness. He was a large man. His frame was large, his mind was large, his heart was large. He sympathized with all, because he comprehended all; and he comprehended all, (if that is not an identical proposition), because he had all in himself. He

was a whole man, and therefore he was a man of universal sympathies and universal power. He had in him all that is properly human, and had it in large measure, and therefore he could not fail to have in himself the measure of all minds and the key to all hearts.

He had naturally great physical strength and powers of endurance; and though by overtasking his prodigious powers by more prodigious exertions, he early impaired his health and strength, still down to the last years of his life, few could climb mountains or break rocks with him —few could endure so much fatigue as he on a geological excursion.

No man could look even for the first time upon his high and massive forehead, and doubt for a moment, that it was the index and the instrument of a gigantic intellect. His brain was not only immense, but, as his whole structure and temperament clearly indicated, it was of the finest and most delicate material. Large as was the framework of bones, and strong as was the texture of muscles and sinews, it was pervaded and over-mastered by a still more remarkable nervous development. And this also was of the finest texture. Every bone and muscle and sinew was alive with sensibility. Every organ thrilled to its extremity with the excitement of his mind, when it was roused to action, every nerve and fibre of his body quivered with pain or pleasure, as his heart sank with sadness or leaped for joy within him. No man of less sensitive nature can imagine what he suffered, when body and spirit both were wounded. No language can express what he enjoyed, when body, soul, and spirit were all in harmony, and all seemingly filled with the charms of nature, the delights of science, or the love of God.

No word of less comprehensive and exalted signification than the word *genius* can express the variety, versatility and greatness of his intellectual powers. And in so saying we do not understand that word in the low and narrow sense to which it is often desecrated; but we take

it in its only full and proper sense as denoting an unusually large development of all the powers proper to man. It were not easy to say, whether observation or reflection, perception or memory, reason or imagination was his predominant faculty. Quick and accurate observation of nature was, of course, the foundation of his scientific discoveries. He was also a sharp observer of men and things. His judgment of character, like his interpretation of natural phenomena, was quick and seldom erroneous. He had the originality and creative power which belong to genius. He was made for a discoverer, for an originator of new ideas, new theories, new methods, new measures. He was tall enough to see over the heads of other men, and catch the first dawning beams of a new day. He had more faith than most men, in new discoveries. This believing disposition sometimes welcomed a premature announcement or a fabrication even, like the celebrated moon-hoax; but it expected great things, attempted great things and achieved great things for science. It wrought miracles in the scientific world. He saw an element of truth in Phrenology, recognized some unknown and mysterious power in Animal Magnetism, or Mesmerism as he more frequently called it, and, in the true spirit of a philosopher, sought to eliminate the truth and discover the power. As a Christian philosopher, he welcomed every discovery in Geology and the physical sciences, never doubting, that they would not only harmonize with, but illustrate and confirm the Sacred Scriptures. Ichnology, as a science, began, and as yet may almost be said to end, with him. He was the originator of the State Scientific Surveys. The American Scientific Association sprang from his suggestion; and he was its first president. His originality in starting new doctrines, and new arguments in Natural Theology, is seen in instances too numerous to mention. His mode of answering the objection to the Resurrection of the body, his proofs from Geology of the general benevolence of God, of special providence

and of special Divine intervention in nature, and his Telegraphic System of the Universe, may serve as examples. He possessed in a remarkable degree that power of rapid and wide generalization, by which the fall of an apple suggested to Newton the law of universal gravitation. Taught by a few terraces on the hill-sides, he could reconstruct the Connecticut Valley at each successive geological epoch of its existence; and guided by a few foot-marks in the sandstone, he could re-people it with its various orders and tribes of primeval inhabitants. If he had not been a great geologist and naturalist, he would have been a great astronomer and mathematician. The question, which he should be, turned, not on the faculties with which he was endowed, but on the accident, or rather the providence, of his impaired health and eyesight.

He might have made a great poet. He possessed the poetic faculty in large measure—not the faculty of rhyming merely though that came easy to him—but the creative power of imagination. There is more poetry in the "Coronation of Winter," the sermon in "A Wreath for the Tomb," or "The Telegraphic System of the Universe," than there is in many a long and popular poem. In certain states of his brain and nervous system, he saw visions,—with his eyes closed but not in sleep—visions of unearthly beauty and glory. Imagination mingled with his religious faith and emotions; and then he saw visions of God and heaven and, like Payson and not a few other men of similar temperament and like precious faith, described them in words of more than human eloquence.

Wit and humor were not wanting in him, as, according to Coleridge, genius never *is* destitute of those powers. His conversation, his lectures and his books were enlivened with playful flashes. Now and then a publication of his is overflowing with facetiousness and fun, like the Zoölogical Temperance Convention in South Africa; though usually these faculties are overshadowed by those of a larger and more solid kind. Only a short time before

his death, he called my attention to a huge bowlder of pure copper which lay in his sick room, and invited me to put it in my pocket and carry it home with me.

In short, he had in him the stuff and also the working power of half a dozen men, and each of them more than a common man. When sick, he could do more work than any well man about him. And in perfect health, he could turn off the work of half a dozen. In addition to the engrossing labors of a professorship combining several distinct departments, or of the presidency combined with a professorship quite sufficient of itself to employ one man, and besides the innumerable special plans and efforts to raise funds, build cabinets and make scientific collections, he has published to the world more than twenty books, of all sizes from small duodecimos to large quartos, besides innumerable articles in the daily, weekly, and quarterly literary, scientific or theological journals, amounting in all to eight thousand pages. Several of these books, besides numerous editions in this country, have been republished in Europe and won for him a world-wide reputation. His labors have shed lustre on the country that gave him birth, and have made the Connecticut Valley a classic land, whither men of science from all nations must go on pilgrimage, if they would see the best ichnological cabinet in the world, and indeed the only one that deserves or claims that distinctive name. And as they visit that cabinet, and the other scientific collections and buildings on this consecrated eminence, under the name of Edward Hitchcock, they will read the inscription: si monumentum quaeris, circumspice.

At the same time, his modesty was equal to his greatness. It is said, that genius is always unconscious. Certainly true wisdom is always modest. None but the truly wise and great are fully aware how little they *do* know. The ancient sage, who was pronounced by the oracle the wisest of men, acknowledged his superiority to other men only in this: they were ignorant without being aware of it,

he was conscious of his ignorance; and to know one's ignorance is to know something. In conversing with Dr. Hitchcock, neither stranger nor friend would have suspected from anything in his air or manner, that they were conversing with a man whose name was a synonym with science in every part of the civilized world. He never seemed to be aware that he had done anything—never seemed to think he *could* do anything. When he used to experiment in chemistry, his experiments were always going to fail; but they never *did* fail. When he began a book or an exploration, he always doubted if he should be able to finish it. Those who did not know the man, when they saw him always speaking with so much self-distrust and yet always acting with such apparent self-reliance and such marvelous success, were sometimes tempted to charge him with affectation. But never was there a man more genuine in his whole character—never one more sincere and unaffected in his self-depreciation. He was constitutionally self-distrustful. He distrusted his piety. He distrusted his own wisdom. He distrusted his memory. He distrusted his health. A constitutional diffidence prevented his speaking extempore with anything like the ease and fluency, which characterized his written productions. When aggravated by ill health and bad weather, this self-distrust sometimes became morbid. It made him think he was going to die, when others saw, that he was in no immediate danger. Sometimes, though rarely, it deterred him from undertaking or prevented his accomplishing what he might otherwise have done. For instance, he was appointed by the Governor of New York to make a geological survey of the eastern section of that State. He made his preparations and went upon the ground; but encountering bad weather and suffering from depression of spirits, he retreated before it, returned home, and resigned his commission into the hands of the Governor. But such instances were rare. On the whole, he probably accomplished more for this very anomaly in

his constitution. Always fearing failure, he took the more pains to avoid it. Suffering keenly in all his sensibilities, he sought relief in hard work, deep thought, earnest writing, and heroic action. Thoroughly convinced, that his life was to be a short one, he did with his might what his hand found to do, and did it under the hallowing and inspiring influence of light and motives from another world.

This modesty was connected with the most unaffected simplicity. He was simple as a child. This also is characteristic of genius and real worth. Ignorance and weakness may well stare and strain at what it cannot comprehend. But genius and true wisdom can speak of the greatest subjects with the familiarity of household words. His style as a writer, though all aglow with imagination and emotion is simple, easy, flowing. He bestowed as little time and labor on the adorning of his thought, as he did on the dressing of his person. He forgot his style, as he forgot himself, and was wholly possessed and inspired by his subject. His dress, his equipage, his whole manner of living was extremely simple. And this modesty—this simplicity was perhaps the most beautiful and the most striking trait in his character. Strangers felt the charm of it as they saw his collection of footmarks in the light of his own presence, and admired the collector and interpreter more than the cabinet. And the savor of it remains with his most intimate acquaintance and friends, fragrant as his moral and religious worth, and more enduring than even the memory of his scientific attainments.

He was temperate in all things, in food, in drink, in the luxuries of life as well as the delicacies of the table. He abstained entirely from the use of intoxicating drinks, as a beverage. At home, abroad, in the houses of the poor, at the tables of the rich, in his solitary explorations and at public celebrations, he was everywhere the same undeviating, unflinching advocate by precept and example of total abstinence as the only safe basis of the temper-

ance reformation, and to that reformation, he was always ready to give his tongue, his pen, his scientific reputation, all the weight of his personal and official influence.

It was an additional recommendation of simplicity and temperance, that they were essential to economy. Economy was with him a Christian duty, at once a safeguard from extravagance and its attendant dangers, and the handmaid of charity and every virtue. For the same reason, he took good care of his property, managed well his business, and was a good economist in getting as well as keeping money, that he might have wherewithal to do good, as well as to render to every man his dues.

Dr. Hitchcock was not above the practice of honesty and integrity in business transactions. On the contrary, he was scrupulously honest in the most trivial matters. He made it a rule, literally as well as figuratively, to "owe no man anything." I never knew a man, who, in the relations of business and of common life, approached more nearly to the golden rule—the rule of Christian uprightness. "All things whatsoever ye would that men should do unto you, do ye even so to them." This maxim controlled his transactions with the government. Thinking it no more right to defraud the State, than an individual, his charges for service to the public were always reasonable—far lower than the usual remuneration for such services. Hence he always had the entire confidence and good will of the Executive and the Legislature. When he accepted the presidency, he insisted that his salary should exceed that of his colleagues, who undertook to farm the revenue with him, by a smaller per centage than had been customary; and when he resigned, it was his own proposition, that he should receive only half the ordinary salary of a professor. Carrying the same disinterestedness into all the relations of life, it is not strange that he was a hero among his neighbors, and men honored him more, in proportion as they knew him better.

Dr. Hitchcock never did a thing merely because it was

popular and fashionable. His life was one continual protest against popular errors and fashionable sins. He was not indifferent to the good opinions of good men. On the contrary, he was keenly sensitive to the approbation of men. But he was not dependent upon it nor swayed by it. If the public approval came to him in the way of his duty, it gratified him exceedingly; if not, he could do without it. He could wait for the more impartial verdict of posterity, and even that was of small account in comparison with the approbation of God. And the result shows, that popularity, so far as it is worth anything, is most sure to come to those, who do not seek it. Few men out of political life, and few in, have had such a hold upon the masses as Dr. Hitchcock. This is but the reflection and reciprocation of his sympathy for them. His modesty, simplicity, economy and integrity have contributed greatly to increase it. The common people of Massachusetts, very many of them, knew him personally. They had seen him in the fields, among the rocks, on the mountains, in a costume like their own, and, what was more, with a heart like their own, only larger; and they have always reckoned him as one of their own number—the great scientific commoner of the old Bay State.

Still only his intimate friends knew all the largeness of that heart. And all its warmth and tenderness were known only to that little circle, who knew and loved him as a husband and father. No language but their tears can tell what he was to them in the familiar interchange of the ministries, courtesies and affections of his own home; and even tears are all inadequate to speak the grief and anguish of their hearts. We will not presume to invade the sanctuary of their love and sorrow. We will only say that Dr. Hitchcock loved home, sighed for it in his absence, returned to it the moment he was at liberty, and never was so happy in the highest honors which the world lavished on him, as in the bosom of his affectionate, faithful and devoted family.

The life of Dr. Hitchcock cannot be properly narrated, even in its outlines, without some allusion to Mount Holyoke Seminary. Nor can the history of Mount Holyoke Seminary be written without large reference to Dr. Hitchcock. Sympathy for the masses conspired with his zeal in the cause of Christian education to interest him deeply in all the early plans and efforts for the establishment of such an institution. Miss Lyon, the founder of Mount Holyoke, had been known and highly esteemed by him as a teacher among the hills of Franklin county and at Ipswich; and when she was laying broad and deep her plans for an institution more elevated and more permanent than had ever yet been reared for the education of woman, she was, for months, a member of his family. All the principles and methods in which it should be founded and conducted were discussed with him and other friends of learning and religion at his house; and when at length these were sufficiently matured, his tongue and his pen were among the chief organs for communicating them to the public. And from that time to the day of his death, next to Amherst College, Mount Holyoke Seminary was the child of his affections, the subject of his prayers, the object of his constant watch and care. The last commission which I ever received from him was to affix his name to the petition which the trustees of the Seminary have just laid before the Legislature of Massachusetts, asking a grant in aid of its funds and for the enlargement of its educational resources. These two institutions in the Connecticut Valley which are so largely indebted to him for their existence and their character, will perpetuate his name and his influence so long as they faithfully represent that idea —science and religion—which was the motto of his life.

As we have already said, it was the highest glory and the chief joy of this great and good man, that he was a humble, penitent, believing and adoring disciple of Christ. All the powers of his body, all the faculties of his mind, all the warmth and wealth of his heart, all the treasures of

his knowledge and all the honors of his name were brought and laid at the feet of Jesus. And here—at the feet of Jesus—here it was, that his face shone brightest, and his intellect penetrated farthest, and his faith rose highest, and his humility bowed lowest, and his whole character appeared invested with a true moral grandeur. Entertaining a profound veneration for the Scriptures as the inspired word of God and an unerring rule of faith and practice, he brought all his powers and acquisitions to bear upon the right interpretation of them, and wherever he found an unequivocal Thus saith the Lord, it was to him the end of all controversy. Fully believing that Christ was the Alpha and the Omega of all God's revelations to men, whether in the kingdom of nature, providence or grace, he made Christ the beginning and end of his teaching and preaching. Christo et Ecclesiæ was the motto of his professorship and his presidency; and every book that he wrote, was directly or indirectly dedicated to Christ and the Church. From the moment when he first felt the power of Christian truth in his own heart to the last day of his life, it was his paramount object to bring men to the knowledge, faith and obedience of Christ. His sermons, though remarkable for their variety and richness, were not less remarkable for their spirituality, pungency and moral power. They grew longer as he advanced in years, stronger, richer in thought, argument and illustration; but they were also more thoroughly anointed with a holy unction, more fully baptized with sacred fire. His lectures, wherever they might begin, were sure to end as the Bible ends, at the throne of God and of the Lamb. He found "the Cross in Nature, and Nature in the Cross." Of all the sciences, which he studied and taught, theology was the center. Nay, in his later years, he taught the natural sciences only as *parts* of Natural Theology, and thus as foundation stones to revealed religion. His book entitled "The Religion of Geology" is the type of his writings and of his life. That book has commended re-

ligion to many a skeptical mind. Many a disbelieving student has been convinced, many a doubting student established in the faith, by his lectures on the Analogies between Geology and Natural and Revealed Religion. Still more have been convinced and persuaded of the reality of experimental piety by his unquestionably sincere, consistent, holy life. Not in college only, but years after, amid the temptations and trials of public life, when wave after wave has gone over them and the foundations have almost been swept away beneath their feet, they look back and say, "Well, whatever else may be doubtful, I cannot doubt that Dr. Hitchcock was a real Christian; and the religion which satisfied him, and made him what he was, is true enough and good enough for me." There was a beautiful harmony between his teaching and his life. If the reconciliation of Philosophy and Faith was the subject matter of his teaching, his life was the embodiment of Faith and Philosophy. As he insisted much in his writings on the credibility of miracles and prophecies from the analogy of nature, and the consistency of prayer and special providence with the uniformity of nature's laws, so he regarded his whole life as a continual series of special providences and answers to prayer, and Divine interpositions just as marked and just as manifest to his mind, as if, to use his own favorite illustration, he had seen the sun and moon stand still, or the waters of Jordan divide, that the people of God might pass over.

With the self-distrust and self-depreciation, that was natural to him, he never was very confident of his own good estate. But he never doubted the reality or the richness of the *inheritance*. He had no more doubt of the truth and divinity of the Christian religion than he had of the truth of a mathematical demonstration, of a doctrine or fact in science, or of the real existence of that material world, which it was his life work to explore. There was not only the same certainty in the one case as in the other, but the evidence was very much the same.

That religion commended itself to his rational and moral nature. Its facts were established by unimpeachable testimony. Nay, it was itself a stupendous fact, firm as the solid earth, lofty and enduring as the everlasting mountains, which he had seen with his own eyes, and whose truth and beauty, grandeur and power he had felt in his own heart. Such was the purport of the last words he said to me, as I stood by his bedside in what he then thought to be his last illness, five years ago: "You know," he said, "I have never been confident of my personal interest in the great salvation. But the foundation stands sure. I have not a doubt of it—not one single doubt. It is firm as the everlasting hills. I may not stand upon it. I do not deserve to rest upon it in my dying hours. I have been too great a sinner. I have done too little for my Lord and Master. But," said he, bursting into tears, "I do not wish for anything surer, brighter, better than the hope of the real Christian. I cannot imagine anything more glorious. I want words to express how glorious it now appears to me." Yes, venerated father, the foundation *does* indeed stand sure, as Mount Zion above; and thy feet are now planted on it. The inheritance *is* glorious, and not more solid and enduring in itself, than securely and inalienably thine. The title was doubtful to none but thyself, and *thy* doubts have given place to actual possession. Thy mingled hopes and fears are both forgotten in full and everlasting fruition. Now are thy brightest imaginings of heavenly purity and beauty infinitely surpassed by the present reality. Now dost thou behold the worlds which God has made, and which, to thy earthly sight darkened by clouds and storms, appeared so beautiful—now dost thou behold them with unclouded vision in the very light of His presence; and how glorious beyond comparison must they be with the Lord God and the Lamb for the light thereof! All is well with thee. For thy sake we would not wish thee back to earth. But alas for us, thy children, whom thou hast left behind, bereft,

forlorn, fatherless! Shall we never again lean on thy strong arm? Shall we never more sit at thy feet for instruction? Shall nature henceforth be dumb, or speak to us only in unintelligible signs, having lost her interpreter? Shall we never again listen to thy voice as the voice of God in the sanctuary? Wilt thou never again be *our* voice in prayer to God? Shall the officers and students of this college no more share in thy prayers and counsels? Shall the college no more rest upon that pillar, which has so often sustained it under the heaviest pressure? Shall the churches and their pastors never again see in their parsonages and their pulpits him whom they have so long revered as a father? "Our father, our father, the chariot of Israel, and the horsemen thereof!"—But it is vain to call after him. "He is not, for God took him." Let us take up his mantle, and return to the school of the prophets, to our place of study, to our field of labor, whatever it may be. And oh, that a double portion of his spirit might rest upon us during our earthly pilgrimage. And when our change shall come, may he welcome us to the presence of his Savior and our Savior, his God and our God. And then again will we sit at his feet and hang on his lips, as he interprets to us the wonderful works of God.

Dr. Hitchcock bore the sentence of death written, as it were, on his heart during the larger part of his life. With almost literal truth, and with emphasis, might that have been said of him which, in another sense, is true of us all: he began to die almost as soon as he began to live. His health broke down in the midst of his laborious astronomical observations and calculations in 1811, when he was only eighteen years of age; and the comet's tail which, as his physician facetiously remarked, then got into his stomach, remained there in the form of a chronic dyspepsia and then of a wasting marasmus to the day of his death. He was dismissed from his pastoral charge in Conway on the express ground as stated by himself and ac-

cepted by the council, that "there was no reasonable prospect of his being able to serve the people permanently and profitably in the duties of the ministry." He entered upon his professorship in the hope that "the great amount of physical exercise" which it required "might enable him to hold out" at longest only "a few years." In his second annual report to the trustees after entering upon the duties of the presidency, he informs them that he had "reached that state in which his life was little else but a scene of severe suffering," and, though he would cheerfully endure the suffering and die at his post if thereby he could hope to carry the college safely through its exigencies, yet there seemed little prospect of his accomplishing so desirable a result. Throughout his entire public life he preached and taught as a dying man, with the grave always in sight, sometimes almost stepping down into it, and ever and anon weaving "A Wreath for the Tomb." What earnestness this gave to his labors, what vividness to his conceptions, what intensity to his language, what almost prophetic inspiration to his pen and lips and life, none need be told. The visions of God and heaven which he brought back from these near approaches to the spirit-world, are among the richest legacies that he has left behind him.

It is now more than six years since he asked me, as a last proof of the friendship and affection which had so long existed between us, to perform the part which I perform to-day. Five years ago, physicians and friends despaired of his life; she who had been his help-meet and his organ of hope, the balance-wheel and almost the mainspring of his life, gave him up and called on me to fulfill my pledge; and at that time the body of this discourse was prepared substantially as it has now been delivered. Had he died then he would have been saved an immense amount of suffering, and she who knew so well how to minister to him, could have smoothed his dying pillow. But *she* was destined to go before him, and by showing

how easy and how beautiful a thing it is for a Christian to die, to relieve his fear of death and thus, perhaps, to render him a more essential service. If he had died then, the world would have said, it was a completed life. But not so heavenly wisdom. Before heaven could say to him, "Servant of God, well done," he must live on and labor on through years of suffering, years of dying they might almost be called, still writing and publishing, still, like the aged Athenian sage, learning many things, still interpreting nature and studying his own frame so fearfully and wonderfully made, still lecturing to his classes though too feeble to go to them, and therefore inviting them to come to him, still making large and choice collections for his cabinet, still caring and planning for his beloved college, still toiling to enlarge the boundaries of science and, so far as possible, to perfect his favorite department, still watching with jealous eye his own heart, the spiritual condition of the college and the interests of evangelical religion—all the while battling heroically with death and "him that has the power of death," and nobly illustrating the triumph of mind over matter, of faith and philosophy over all the powers of darkness even in the last extremity. He continued to ride on horseback till he could no longer sit in the saddle. Then he consented to be driven in a carriage; and when he was no longer able to bear this, he was carried out in a chair borne by his two sons, that he might breathe the out-door air which he so much loved and look upon the face of nature, his beloved. He told me, he had no doubt he had prolonged his life for months after most persons would have succumbed to the power of disease, by the care with which he had watched, and—with the help of those ministering angels, his physician and his children—guarded the citadel. The activity and clearness of his mind at times during these last months was wonderful, and he said, he had a thousand thoughts and a thousand plans which he would have loved to execute—had Providence prolonged his life—all in his chosen

sphere of science and religion. With the lively imagination which was so characteristic of him, he sometimes saw himself surrounded on every side by diagrams of his favorite sciences which, for the time, so delighted his eyes and so engrossed his thoughts that he could hardly forgive his attendants if they interrupted him with the untimely, the almost profane intrusion of his medicines; though afterwards with a kindness and politeness which was no less native and which his physician often noted, he would make ample amends for it, and perchance with his characteristic humor, turn it off with a pun or some other pleasantry.

He loved to converse on personal religion, and was grieved when his Christian friends who called on him, seemed to avoid the subject. The last time I saw him, which was five days before his death, he expressed his feelings more fully than usual. After speaking of his unshaken confidence in the immovable foundations of the evangelical Christian system and the absence, as from most of his former life, so now from his sick bed, of such sensible manifestations of the Divine presence as some Christians enjoyed, he was asked if Christ was not precious to him: "Precious!"—he exclaimed with an inflection and an emphasis which spoke volumes—"of *course*, he is unspeakably precious. But that is no more than everybody says who is not entirely destitute of the Christian's hope. He is more than that—infinitely more. He is everything. He is all in all." He then went on to express his longing desire to depart and be with the loved ones that had gone before him, with his pious friends and acquaintances who were in heaven, and with all the wise and good of all ages; and with them to celebrate the praises of his God and Redeemer. The last night of his life, he seems to have been fully aware that the hour of his departure was at hand. For the most part, he was in the full possession of his faculties, though he sometimes seemed to see gathered about his dying bed friends

that were not there. Less than an hour before he died, feeling that his head was not supported as he wished, he laid his hand on the pillow by his side and said, "*There, place the cross there.*" His son responding, "Father, I thought you had always had the cross near you." "Yes," said he, "But I have learned its value here—right in this place." "*Remarkable!* REMARKABLE!!" Not long after, he lifted up his hands, and said, "I am going—I am going—farewell to earth." These were his last words. He breathed less frequently and more feebly for half an hour, and then—just as the day was dawning—his spirit passed from the darkness and sorrow of earth to the light and glory of heaven. All his life-time, he had been more or less subject to bondage through fear of death. But he fell asleep at last as sweetly as an infant in its mother's arms. He often mourned that he had no more sensible manifestations of the Savior's presence, and enquired anxiously of his Christian friends if he would probably have dying grace given him for a dying hour. But he died leaning his head on the cross almost visibly present by his side and wondering at the riches of redeeming, sanctifying, sustaining grace:

> "Thou art gone to the grave! and, its mansion forsaking,
> Perchance thy weak spirit in *doubt* lingered long:
> But the sunshine of glory beamed bright on thy waking,
> And full on thine ear burst the seraphim's song."

And there, the last, best, fondest desires of his heart have been more than realized. There he has already been reunited to her whose death before him took away more than half of his own life, and with united hand and heart and voice, as on earth so in heaven, they have laid their united offerings at the feet of Jesus. There he has been welcomed by Moore and Humphrey and Graves and Packard and Fiske and Adams and Peabody and Edwards and Clarke, and other colleagues in the government and instruction of Amherst College; and together they have thanked God for the success with which he crowned their

toils and struggles in building such an institution. There parishioners and pupils who loved and honored him as their spiritual father, were doubtless waiting to greet him; and he has presented them before the throne, saying, "Here am I and the children thou hast given me." There savants and scholars in whom he delighted on earth as not only brethren in science but brethren in Christ, have doubtless recognized him and introduced him to that grand association of Christians and scholars and philosophers wherein are gathered all the truly wise, from the days of the wisest of men, and long before, to the present time; and he has joined with them as they—now without one dissenting voice or one reluctant heart—cast their crowns before Him in whom "are hid all the treasures of wisdom and knowledge." There he has met with prophets and apostles and martyrs and those who have been wise in turning many to righteousness, and while with them he shines as a sun in the kingdom of their Father, with them too he sings that new song, which will never grow old: "Unto him that loved us and washed us from our sins in his own blood and hath made us kings and priests unto God and his Father; to him be glory and dominion forever and ever." "And I heard a voice from heaven saying unto me, Write, blessed are the dead which die in the Lord: yea, saith the Spirit, that they may rest from their labors, and their works do follow them."

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